

# Instruction Manual

## A WORD ABOUT YOUR SYSTEM

The PC2500 Security System has been designed to give you the greatest possible flexibility and convenience. Read this manually carefully and become familiar with the operation of your Security System. Your Installer will tell which commands listed in this manual apply to your system. Fill out the SYSTEM REFERENCE sheet in this manual and store it in a safe place for future reference. The label provided for the inside of the Keypad door can be used to record which sensors are on each zone.

### IMPORTANT NOTE

Remember that no security system can prevent emergencies. It is only intended to alert you in case of an emergency and should not take the place of prudent security practices or life and property insurance.

It is important to test your system every week. To do this, first inform the monitoring station that you are testing your system. Then, with the system Disarmed, activate all detection sensors one at a time and observe the zone light come on at the Keypad as each sensor is activated. Perform a Bell test by entering [\*],[6],[MASTER CODE],[8] with the system Disarmed. The PC2500 can be programmed at the time of installation to automatically perform a test transmission to the monitoring station on a regular basis. If the system has not been programmed for this automatic test, call the monitoring station for instructions on how to perform a test transmission. Don't forget to inform the monitoring station when you have finished your test.

Check to see if the "Trouble" light is on when when Arming the system. See the "Trouble Display" section in this manual for a description of the different trouble conditions. Contact your Installer for assistance if the Trouble cannot be located and corrected.

### HOW YOUR SYSTEM WORKS

Your Security System is made up of a Control Panel, and one or more keypads and various detectors and sensors. The Control Panel will be mounted out of the way in a utility room or basement. The metal cabinet contains the system electronics, fuses and standby battery. There is normally no reason for anyone but the Installer to have access to the control panel. The Keypad(s) have an audible indicator, display lights and command entry keys. The keypad is used to send commands to the system and to display the current system status. Keypads are mounted in convenient areas close to the Exit-Entry doors. The security system has up to eight zones or areas of protection. Each zone used will have connected to it, various sensors such as door or window contacts, motion detectors, glassbreak detectors and vibration or shock sensors. When a sensor is in alarm, a Keypad light will be on to indicate which zone is in alarm.

**SYSTEM REFERENCE**

ZONE	PROTECTED AREA	ZONE TYPE
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____

FIRE \_\_\_\_\_

KEYPAD ZONE [1]-[3] \_\_\_\_\_ FIRE

KEYPAD ZONE [4]-[6] \_\_\_\_\_ EMERGENCY

KEYPAD ZONE [\*]-[#] \_\_\_\_\_ POLICE

MASTER CODE NUMBER \_\_\_\_\_

PROGRAMMED CODE NUMBERS :

[2] \_\_\_\_\_ [3] \_\_\_\_\_ [4] \_\_\_\_\_ [5] \_\_\_\_\_

[6] \_\_\_\_\_ [7] \_\_\_\_\_ [8] \_\_\_\_\_

SYSTEM ENTRY TIME \_\_\_\_\_ seconds    SYSTEM EXIT TIME \_\_\_\_\_ seconds

MONITORING STATION INFORMATION :

Account # \_\_\_\_\_ Phone \_\_\_\_\_

FOR SERVICE :

CALL \_\_\_\_\_ Phone \_\_\_\_\_

**NOTES :**

## **MASTER CODE**

The 4 digit Master Code is used for Arming and Disarming the system, for programming additional security codes and for changing other features. The Master Code will be supplied to you by your Installer. All keypad entries are made by pressing one key at a time. The Master Code can be changed at any time. (see Programming Additional Security Codes)

## **ARMING**

Close all protected doors and windows and stop movement in areas covered by motion detectors. If the Bypass light is ON, be sure zones are being intentionally bypassed before arming the system. (see Zone Bypassing) Check to see that the Ready light is ON. (all zones are closed) The System cannot be Armed unless the Ready light is ON. Enter a [4 digit security code]. As each digit is entered the keypad sounder will beep. Once the correct security code is entered the Armed light will come on and the keypad sounder will beep quickly. If the security code was entered incorrectly or the Ready light was not on, the keypad sounder will beep steadily for 2 seconds. When the correct code is entered and the system is armed, exit through the door indicated by your Installer as the Exit-Entry door. At the end of the allowed Exit time, all lights on the keypad will go out except for the Armed light. The Exit time may be changed by your Installer. (see also Quick-Arm)

## **AUTO-BYPASS OPTION - HOME-AWAY ARMING**

This feature, if selected by your Installer, will allow to Arm your system with any valid user code and the system will automatically Bypass the interior zones if those interior zones have been designated as Home-Away zones by the Installer. The Bypass light will come on. If you exit within the allowed exit time, the system will automatically reactivate the interior zones. This feature is designed to save the customer from having to manually Bypass interior zones each time they wish to Arm the system and remain at home.

In residential applications where the system has been Armed and the interior zones are automatically Bypassed, the interior zones can be reactivated from a keypad outside the interior zones protection area. To reactivate the interior zones, press [\*] then [1] and the Bypass light will go out.

## **ENTRY DELAY OFF ARMING**

If you wish to Arm your system and eliminate the Entry Delay, enter [\*],[9] before your security code. The Armed light will flash as a reminder that the system is armed and has no Entry delay. An entry through any zone programmed as a delay zone will create an instant alarm.

e.g. To Arm without Entry Delay.....Press [\*],[9],[Security Code]

## **DISARMING**

Enter the premises only through the door indicated by your Installer as the Entry door. The keypad sounder will be on. Go to the Keypad and enter the [4 digit Security Code]. If an error is made entering the code, press the [#] key and enter the code again. The armed light will go out and the keypad sounder will stop. The correct Security Code must be entered before the allowed Entry time expires. The Entry delay time may be changed by Installer.

## **DISARMING (cont'd)**

If an alarm occurred while the panel was Armed, the Memory light and the light for the zone which caused the Alarm will start to flash and will stay flashing for 2 minutes. At the end of the 2 minutes, the keypad lights will stop flashing and keypad will return to the normal Ready condition.

If you return home and find an alarm has occurred while you were away, it is possible that an intruder may still be on the premises. Go to a neighbor's and if your system is monitored, call the monitoring station. They will advise what action has been taken as a result of the alarm and whether the premises are safe to enter. If your system is not monitored, call the local police to investigate.

## **ZONE BYPASSING**

Bypassed zones do not cause an Alarm. Use zone bypassing when access is needed to part of the protected area. Also, damaged wiring or contacts on a zone may be temporarily bypassed until repairs can be made so that the panel can be Armed.

To Bypass zones, enter [\*],[1],[Security Code] and the zone numbers to be Bypassed. If the [0] key is pressed instead of a zone number, all zone Bypasses will be removed. If the [9] key is pressed, the last group of zones which was Bypassed will be recalled. Press [#] to return to Ready.

For security reasons, your Installer may prevent the Bypass command from operating on certain zones.

The Bypass light is on as long as at least ONE zone is Bypassed. Do not unintentionally Bypass zones when Arming. Zone Bypasses are automatically canceled each time the panel is Disarmed and must be re-applied before the next Arming.

## **TROUBLE DISPLAY**

The PC2500 continuously monitors a number of possible trouble conditions. If one of these conditions occurs, the keypad sounder will beep quickly twice every 10 seconds and the keypad Trouble indicator will light. Pressing any key on the keypad will silence the beeper but the trouble light will remain on until the trouble condition is cleared. If you cannot determine the cause of the trouble condition, call your Installer for assistance. Press the [\*] then [2] keys to display the type of trouble.

The Zone lights indicate the type of trouble condition.

1. Defective Standby Battery
  2. AC Power Failure (see note below)
  3. Foil Circuit Trouble
  4. Telephone Line Problem
  5. Unsuccessful communication attempt with monitoring station.
  6. Bell Circuit Failure
  7. Smoke Detector Circuit trouble
  8. Loss of Time on System Clock
- Press [#] key to return to Ready

**Note:** The keypad buzzer will not sound for AC failure until there is also a low battery condition. The system light will come on as soon as AC fails and will remain on until AC restores

**READY** light "on" system ready for arming.  
**READY** light "off" open zone. Must be closed or by-passed before arming.

**ARMED** light will come on indicating system armed. Ensure **READY** light on, enter 4 digit code.

**MEMORY** light on means an alarm has occurred. To display zone that caused alarm, press [\*] then [3]. Zone light will come on indicating which zone caused alarm.

Hold down [1] and [3] at the same time for fire alarm.

**ZONE** light(s) when on in the normal operating mode indicate an open zone. eg: open door, window, etc. Refer to zone chart on keypad door for zone information.

**SHUNT** light will come on when you by-pass a zone. To by-pass a zone, press [\*], [1], [MASTER CODE] and then the zone(s) you wish to by-pass. Press [#] to return to ready.

**TROUBLE** light on means there is a fault on the system. Press [\*] then [2] to display trouble type:

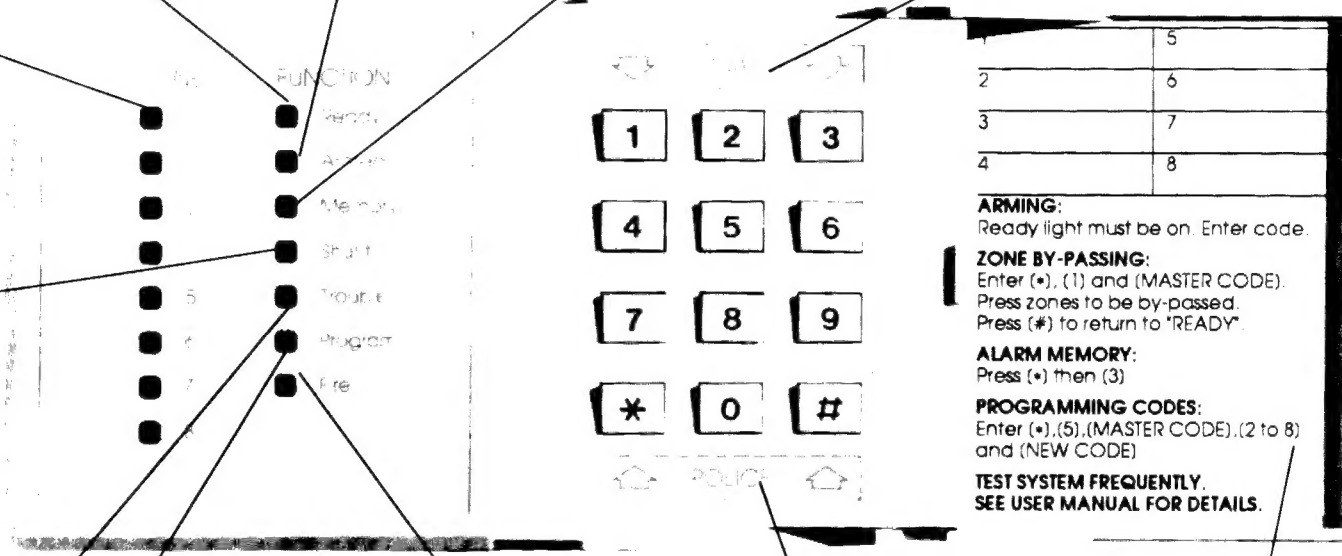
1. Battery	5. Communicator
2. A.C. Power	6. Bell circuit
3. Foil loop	7. Smoke detector circuit
4. Telephone line	8. Clock needs resetting

**PROGRAM** light is on when you program user codes. Press [\*] then [5] then enter Master Code, program light will come on. Select which code you wish to program 2 thru 8, then enter 4 digit code. Press [#] to return to ready. Program light must be "on" to add or change user codes.

Hold down [\*] and [#] at the same time to summon police.

**FIRE** light is on when a detector on the fire loop is in alarm. Press any key within 30 seconds of first alarm to get 2 minutes to reset detector. Press [\*] [4] to reset smoke detectors.

Key pad door has zone identification and basic user instructions. Protects keypad when keypad not in use.



1	5
2	6
3	7
4	8

**ARMING:**  
 Ready light must be on. Enter code.

**ZONE BY-PASSING:**  
 Enter (\*), (1) and (MASTER CODE).  
 Press zones to be by-passed.  
 Press [#] to return to "READY".

**ALARM MEMORY:**  
 Press (\*) then (3)

**PROGRAMMING CODES:**  
 Enter (\*), (5), (MASTER CODE), (2 to 8) and (NEW CODE)

**TEST SYSTEM FREQUENTLY.**  
 SEE USER MANUAL FOR DETAILS.

## ALARM MEMORY DISPLAY

If the Memory light is on, an alarm has occurred since the last time the panel was Armed. The alarm memory will automatically be displayed when the system is disarmed. (see Disarming)

Press the [\*] then [3] keys to display which zone caused the alarm.

The Alarm memory will be cleared when the panel is re-armed.

Press the [#] key to return to Ready.

## SMOKE DETECTOR AND FIRE ALARM RESET

If your system is equipped with smoke detectors or other Fire Alarm detectors, use the following instructions for resetting an alarm. Before resetting a Fire alarm signal, be sure you know the source of the Alarm and that there is no danger. ( see Evacuation Planning elsewhere in this manual)

The system Bell/Siren alarm signal pulses 2 seconds ON and 2 seconds OFF when the Alarm is generated from the Fire circuit. The transmission to the monitoring station is delayed by 30 seconds. The alarm may be silenced and the transmission delayed for 2 minutes by pressing any key on the keypad. If the detector causing the alarm is reset before the 2 minute delay expires, no further alarm will occur. If the detector is not reset, at the end of the delay the Alarm will start again and the transmission will occur in 30 seconds if a keypad key is not pressed.

An immediate Fire Alarm signal and transmission is generated by holding down the [1] and [3] key.

Some smoke detectors require entering a keypad command to reset them after an alarm. Press [\*] then hold down the [4] key for several seconds. If the smoke has cleared, the smoke detector will reset and the Fire zone light will go out when the [4] key is released. If the smoke has not cleared from the detector, open a window or door and fan clean air into the detector and try resetting again.

## PROGRAMMING ADDITIONAL SECURITY CODES

Enter [\*],[5] and [Master Code], the Program light will flash and the Zone lights will show which codes have already been programmed. Up to 7 codes in addition to the Master Code can be programmed from the keypad.

Press any key (from 2 to 8) to indicate which one of the 7 additional codes is being programmed. The Zone light will flash to indicate which code is being programmed.

Enter a [4 digit code]. At this point if [\*\*\*\*] is entered instead of a [4 digit code], any previously programmed code in this location will be eliminated.

**NOTE : ENTERING [\*],[5],[MASTER CODE],[1],[NEW 4 DIGITCODE] REPROGRAMS THE MASTER CODE**

REVIEW:                      Programming a new code :  
                                    Enter [\*],[5],[Master Code],[1 to 8],[4 digit code]  
  
                                    Eliminating an existing code :  
                                    Enter [\*],[5],[Master Code],[\*\*\*\*]  
  
                                    Press [#] to return to ready

## **QUICK-ARM FEATURE**

When the Quick-Arm feature is enabled, the panel may be Armed simply by entering [\*],[0] instead of a 4 digit code. The [\*],[0] command will not Disarm the panel.

Enter [\*],[6],[Master Code],[4] to turn ON and OFF the Quick-Arm feature. When the command is entered, the keypad will beep 3 times if the feature is being Enabled and will sound one long beep if the feature is being Disabled.

Press [#] to return to Ready.

## **DOOR CHIME FEATURE**

The Door Chime feature is used, while the panel is Disarmed, to provide a tone from the keypad each time a door or window is opened or closed. The doors and windows which will provide this indication are programmed by your Installer.

Enter [\*],[6],[Master Code],[6] to turn the Door Chime feature ON and OFF. When the command is entered the keypad will beep 3 times if the feature is being Enabled and will sound one long beep if the feature is being Disabled.

## **ALARM TEST**

Enter [\*],[6],[Master Code],[8] for a 2 second test of the keypad lights, keypad sounder and alarm bells.

## **KEYPAD ZONES**

There are three zones which can be activated from the keypad. These zones may or may not be active on your keypads depending on how your Installer has programmed them.

[1]-[3] keys....Keypad FIRE zone. Pressing these keys at the same time will activate the keypad Fire zone and the Bell/Siren output will pulse ON and OFF. This zone is annunciated by the Fire light on the keypad.

[4]-[6] keys...Keypad EMERGENCY zone. Depending on how your Installer programs the panel, pressing these keys at the same time may produce a silent or audible alarm along with the transmission.

[\*]-[#] keys....Keypad POLICE zone. Depending on how your Installer programs the panel, pressing these keys at the same time may produce a silent or audible alarm along with the transmission.

## **MAINTENANCE**

With normal use, the system requires minimum maintenance. The following should be observed.

1. Do not wash the keypad with a wet cloth. Light dusting with a barely perceptible damp cloth should remove normal accumulations of dust.
2. The Battery/Bell test is designed to determine Battery condition, however it is recommended that the standby battery be replaced every three years.
3. For other system devices such as smoke detectors, passive infrared, ultrasonic or microwave motion detectors or glassbreak detectors, consult the respective manufacturer's literature for testing and maintenance.

## TESTING

IT IS RECOMMENDED THAT THE SYSTEM BE TESTED ON A WEEKLY BASIS.

1. Inform the monitoring station that you are testing your system.
2. Disarm the system ( Ready light ON)
3. Perform a Bell/Battery test by pressing [\*],[6],[Master Code].[8]. The signal will sound for about 2 seconds. If a trouble occurs after the test, press [\*],[2] to view the trouble condition.
4. Activate each sensor in turn. e.g. Open a door/window and observe the zone light come ON as each sensor is activated. The zone light will go OFF as each sensor is restored to normal. (closed)
5. Press the [1]&[3] keys. The signal will sound in a pulsed mode. Arm then Disarm the panel to silence the signal. Repeat this test by pressing the [4]&[6] keys and the [\*]&[#] keys in turn. Remember, the [4]&[6] and [\*]&[#] keys may not be programmed for an audible signal.
6. If the FIRE zone is used, activation will cause the signal to sound in a pulsed mode. CAUTION : Do not use open flame or burning materials to test a smoke detector. Contact your Installer for information on safe methods to activate a smoke detector.
7. Should your system fail to operate properly, call your Installer for service.
8. When testing is complete, call and advise the monitoring station.

## FIRE SAFETY IN THE HOME

Most fires occur in the home and to minimize this danger it is recommended that a household Fire Safety Audit be conducted and that a Family Escape Plan be developed.

### HOUSEHOLD FIRE SAFETY AUDIT

1. Are all electrical appliances and outlets in a safe condition. e.g. frayed cords, overloaded lighting circuits. If you are uncertain about the condition of your electrical appliances or household electrical service, have a professional evaluation.
2. Are all flammable liquids stored safely in closed containers in a cool well ventilated area. Cleaning with flammable liquids should be avoided.
3. Are Fire hazardous materials (matches) well out of the reach of children.
4. Are furnaces and wood burning appliances properly installed, clean and in good working order. Have a professional evaluation.

### FAMILY ESCAPE PLANNING

There is often very little time between the detection of a fire and the time it becomes deadly. It is thus very important that a family escape plan be developed and rehearsed.

1. Every family member should participate in developing the escape plan.
2. Study the possible escape routes from each location within the house and since many fires occur at night, special attention should be given to the escape routes from sleeping quarters.

## **FAMILY ESCAPE PLANNING (cont'd)**

3. It is essential that escape from a bedroom be possible without opening the interior door. to facilitate such an escape :

- i) Make sure windows and doors that exit to the outside are easily opened. e.g. Not painted shut.
- ii) If opening the exit or simply making the exit is too difficult for children, the elderly or handicapped, plans for rescue should be developed. This includes making sure that those who are to perform the rescue can promptly hear the Fire Warning Signal.
- iii) If the exit is above the ground level, an approved fire ladder or rope should be provided as well as training in its use. Exit onto the roof of adjoining structures (porch) may require the use of an external ladder which should be easily available for setup by other family member or a neighbor.
- iv) Exits on ground level should be kept clear. e.g. remove snow from exterior patio doors.
- v) The family should have a predetermined assembly point where everyone can be accounted for. e.g. across the street or at a neighbours house.
- vi) Once everyone is out of the house, call the Fire Department.
- vii) A good plan emphasizes quick escape. Do not investigate first or attempt to fight the fire and, do not attempt to rescue pets or valuables as this will take valuable time. Once outside, do not re-enter the house. Wait for the Fire Department.
- viii) Write the plan down and rehearse frequently so that should an emergency arise, everyone will know what they are to do. revise the plan as conditions change. e.g. more or fewer family members or changes to the house.
- ix) Make sure your Fire Warning system is operational by conducting weekly tests as noted elsewhere in this manual. If you are unsure about system operation, contact your Installer for information.
- x) It is recommended that you contact your local Fire Department and request further information on home Fire Safety and Escape Planning. If available, have your local Fire Prevention Officer conduct an in-house Fire Safety Inspection.

## LIMITED WARRANTY

Digital Security Controls Ltd. warrants that for a period of twelve months from the date of purchase, the product shall be free from defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls Ltd. shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls Ltd., such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the part of Digital Security Controls Ltd. This warranty contains the entire warranty. Digital Security Controls Ltd. neither assumes, nor authorizes any other person purporting to act on its behalf to modify or to change this warranty, nor to assume for it any other warranty or liability concerning this product.

**WARNING :** Digital Security Controls Ltd. recommends that the entire system be completely test on a regular basis. However, despite frequent testing, and due to but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

## FCC COMPLIANCE

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class "B" computing device in accordance with the specification in Subpart "J" of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient the receiving antenna
- Relocate the product with respect to the receiver
- Move the product away from the receiver
- Plug the product into a different outlet so that the product and receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful.

"how to Identify and Resolve Radio/Television Interference Problems"

This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345